Levitating Pom-Pom Challenge

Kit contains:

- 1 Paper circle with a slit cut along the radius
- 1 Bendy straw
- 1 Pom-pom

You will need: scissors and tape.

Optional supplies for the challenges: a timer, a ruler, and assorted pom-pom alternatives (Examples: cotton ball, foil).

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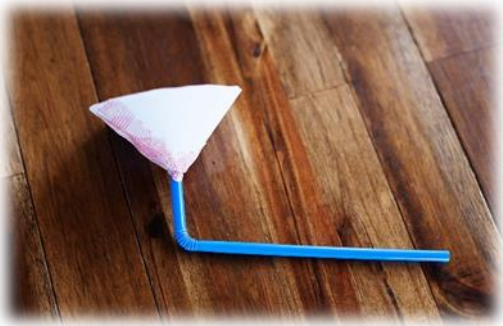
INSTRUCTIONS

Step 1. Turn your paper circle into a cone by overlapping one of the cut edges over the other. Tape to secure.

Step 2. Snip a tiny bit off the tip of your cone to create a funnel.

Step 3. Push the mouth end of your straw through the funnel as shown. It should barely poke through. Tape it in place.



Your device is ready! Place your pom-pom inside the funnel and blow into the long end of the straw to make your pom-pom float and pop.

CHALLENGES!

1. How long can you keep your pom-pom floating? Use a timer to see how long you can blow into the straw and keep your pom-pom in the air.

2. How high can you make your pom-pom pop? The harder you blow, the higher your pom-pom will get! Get a buddy to help measure.

3. See what other objects you can levitate with your breath! Try a piece of aluminum foil, a cotton ball, or other light-weight objects. Are they harder or easier to levitate than a pom-pom?

STEM CONNECTION

Did you know that the maximum amount of air your lungs can hold—your total lung capacity—is about 6 liters? That is about three large soda bottles.

Your lungs mature by the time you are about 20-25 years old. After about the age of 35, it is normal for your lung function to decline gradually as you age.

(Source: American Lung Association)